

# Heat Treated Fibreglass Electrical Sleeving

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## Description

The GSX series sleeving consists of tightly braided fiberglass designated Class 240°C insulation that is heat annealed to remove organic impurities and improve handling. The addition of a tan-coloured, high-temperature resin dye affords additional fray resistance and firmness for cutting and installation. It is used as primary insulation on low voltage applications such as leads in toasters, hot plates hand irons, coffee makers and other applications where low voltage and high temperatures are involved. The GSX series tubing can withstand temperatures as high as 648°C (1,200°F). Sold in 100' spools.

## Features:

The fibreglass sleeving is a custom-braided fibreglass sleeving designed specifically for applications where temperatures as high as 1,200°F may be encountered. It will maintain its basic properties and do the job in appropriate applications.

The heat treatment applied during production gives fibreglass sleeving non-fraying properties that make it ideal for applications where short lengths are used. The heat treatment also sets the size and removes the starch-oil binder. This same sleeving can also be supplied with a light impregnate which further minimizes fraying and helps maintain a round cross-section where this is desirable. Both types are easily expanded for ease of installation.

In addition to the standard wall thicknesses, heavy walls are available. The fibreglass sleeving designs can be produced to meet specific requirements.

For flexibility, expandability, high temperature applications, and resistance to fraying, sleeving is the material to use.

## Applications

The fibreglass sleeving is used where space factor electrical insulation is sufficient, particularly where high temperatures are encountered. It is used as primary insulation on low voltage applications such as leads in toasters, hot plates, hand irons, coffee makers, range units, percolators, french-fry vessels and other appliances.

In some cases, the fibreglass sleeving is used as supplementary insulation and protection for other types of primary insulation such as asbestos, extruded silicone rubber, etc. It is popular as a replacement for asbestos gasketing.

The fibreglass sleeving is used as insulation and protection for small heaters and resistors which operate at high temperatures. A frequent use of the fibreglass sleeving is over electrical joints, especially where solder is used and soldering iron temperatures may be reached by the insulation for short periods.

A new use of the fibreglass sleeving is in vacuum pressure impregnation of stators and rotors, where it is used in heavy wall version on coil ends and leads.

Non-electrical uses include gaskets for range doors and range door windows, as chemical filters, as reinforcement for baseball bat handles and many others.

## Advantages

For low-voltage applications, especially those involving heat, the fibreglass sleeving provides a sturdy, long-lasting and inexpensive insulation. It is flexible and expandable, enabling it to be readily slipped over irregular profiles. It is readily saturated with insulating varnishes or other impregnates. It will withstand use temperatures as high as 648°C (1,200°F)

## Standard Colour

Unsaturated – Natural Silver to Tan

T & D saturated – Black, Red, Yellow and Clear.

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## Notes:

1. Operating Temp. : -60°C to 648°C (-76°F to 1198°F)
2. Temperature Class : Class 240°C insulation
3. Non-Corrosive
4. Fungus Resistance : Does not support growth

## Part Number Table

| Description                                    | Size<br>(AWG) | Inside Diameter |         | Wall Thickness<br>(Nominal) | Part Number      |
|------------------------------------------------|---------------|-----------------|---------|-----------------------------|------------------|
|                                                |               | Minimum         | Maximum |                             |                  |
| Heat Treated Fibreglass<br>Electrical Sleeving | 24            | 0.02            | 0.027   | 0.012                       | GSX-S24-1100-NAT |
|                                                | 22            | 0.025           | 0.032   | 0.012                       | GSX-S22-1100-NAT |
|                                                | 20            | 0.032           | 0.039   | 0.012                       | GSX-S20-1100-NAT |
|                                                | 18            | 0.04            | 0.049   | 0.012                       | GSX-S18-1100-NAT |
|                                                | 16            | 0.051           | 0.061   | 0.012                       | GSX-S16-1100-NAT |
|                                                | 14            | 0.064           | 0.074   | 0.013                       | GSX-S14-1100-NAT |
|                                                | 12            | 0.081           | 0.091   | 0.015                       | GSX-S12-1100-NAT |
|                                                | 10            | 0.102           | 0.112   | 0.015                       | GSX-S10-1100-NAT |
|                                                | 8             | 0.129           | 0.141   | 0.015                       | GSX-S08-1100-NAT |
|                                                | 6             | 0.162           | 0.178   | 0.015                       | GSX-S06-1100-NAT |
|                                                | 4             | 0.204           | 0.224   | 0.015                       | GSX-S04-1100-NAT |
|                                                | 2             | 0.258           | 0.278   | 0.018                       | GSX-S02-1100-NAT |
|                                                | 0             | 0.325           | 0.347   | 0.018                       | GSX-S00-1100-NAT |
|                                                | 3/8"          | 0.375           | 0.399   | 0.022                       | GSX-024-1100-NAT |
|                                                | 7/16"         | 0.438           | 0.462   | 0.022                       | GSX-028-1100-NAT |
|                                                | 1/2"          | 0.5             | 0.524   | 0.022                       | GSX-032-1100-NAT |
|                                                | 5/8"          | 0.625           | 0.655   | 0.022                       | GSX-040-1100-NAT |
|                                                | 3/4"          | 0.75            | 0.786   | 0.022                       | GSX-048-1100-NAT |
|                                                | 1"            | 1               | 1.036   | 0.022                       | GSX-064-1100-NAT |

Dimensions : Inches

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